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Date: January 22, 2008 Refer to: ENV-EAQ:08-020

Ms. Debra McElroy
Manager, Compliance and Enforcement Program
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, New Mexico 87507

IDEA ID 856 – LOS ALAMOS NATIONAL LABORATORY 2007 FOURTH QUARTER BERYLLIUM EMISSIONS REPORT OCTOBER 1– DECEMBER 31, 2007 AIR QUALITY PERMIT NO. 634-M2

Dear Ms. McElroy:

Attached as Enclosure 1 you will find a copy of the sampling data obtained from the continuous air monitor installed on the main exhaust stack at the Beryllium Technology Facility (BTF) at Los Alamos National Laboratory (LANL) for the **fourth quarter of calendar year 2007**. This submission of the quarterly emissions data, collected from this source, is required by permit condition 5.f of NMED Air Quality Permit #634-M2 dated October 30, 1998. Furthermore, this quarterly report is transmitted within the allowed 60 days after the end of the calendar quarter, as specified in the permit.

As specified in permit #634-M2, the beryllium stack emissions from the BTF shall not exceed 0.35 grams in a 24-hour time period and shall not exceed 3.5 grams per year. As can be seen on the attached data sheet, the highest daily emission rate (HDER) during the fourth quarter of calendar year 2007 was < 2.01 x 10⁻⁵ grams per 24 hours, which is well below the daily permit limit. The total amount of beryllium emitted for the fourth quarter of calendar year 2007 was < 1.45 x 10⁻³ grams. Additionally, the total for the first four quarters of calendar year 2007 was < 6.31 x 10⁻³ grams, which is well below the 3.5 gram per year limit specified in the permit. Also, on the attached data sheet, you will note that the last data point for calendar year 2007 is December 20, 2007. This is due to the laboratory closure over the holidays during which time the facility did not process material. Stack samples are not collected during this time and are allowed to remain in the sample collector for two weeks. This two-week sample will be reported as part of the first quarter 2008 emission report for this facility. Based on the attached information, LANL is in compliance with condition #2 of NMED Air Quality Permit #634-M2.

MS. Debra MCEiroy ENV-EAQ:08-020 LA-UR:08-0444

If you have any questions or comments regarding this submittal or would like to discuss this in greater detail, please feel free to contact Steve Story at 665-2169 or Kathleen Gorman-Bates at 665-1338.

-2-

Sincerely,

Dianne Wilburn

Ecology & Air Quality Group

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ENV-EAQ Beryllium Permit #634 Quarterly Report File

ENV-EAQ File

LA-UR-08-0444

Approved for public release; distribution is unlimited.

Title:

2007 Fourth Quarter Beryllium Emissions Report October 1 - December 31, 2007 Air Quality Permit No. 634-M2

Air Quality Permit No. 634-M2
Los Alamos National Laboratory

Author(s):

Kathleen Gorman-Bates, ENV-EAQ

Intended for:

Ms. Debra McElroy

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Los Alamos NATIONAL LABORATORY

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Form 836 (7/06)

Enclosure 1

TA-3-141 StackID: 3014101 Sampling dates

Comments			Run tíme due to holiday.	Duct work was performed during this period. HVAC maintenance. Snow day two hour delay.	
Emissions (g)	Daily(2)	Cannot Exceed 0.35 8/day	 8.69E-06 1.72E-05 1.75E-05 1.73E-05 1.73E-05 	2.31E-05 < 1.70E-05 < 1.78E-05 < 1.73E-05	1.74E-052.11E-051.73E-051.74E-05
	Weekly(1)	Sum of weekty results must be <3.5 g/year	 1.21E-04 1.21E-04 1.21E-04 1.21E-04 1.21E-04 1.21E-04 1.21E-04 1.21E-04 	1.62E-04 < 1.21E-04 < 1.21E-04 < 1.21E-04 < 1.21E-04 < 5.25E-04	 1.21E-04 1.48E-04 1.21E-04 1.21E-04 5.11E-04
		Period #: 1	12/21/2006 - 01/04/2007 01/04/2007 - 01/11/2007 01/11/2007 - 01/18/2007 01/25/2007 - 01/25/2007 01/25/2007 - 02/01/2007	02/08/2007 02/08/2007 02/15/2007 02/15/2007 02/22/2007 Period #: 3	03/08/2007 - 03/08/2007 03/08/2007 - 03/15/2007 03/15/2007 - 03/22/2007 03/22/2007 - 03/29/2007

2.31E-05

HDER

1.64E-03

1st Quarter Total: <

^aHDER = Highest Daily Emission Rate

Beryllium 2007 Stack Emissions TA-03-0141

TA-3-141 StackID: 3014101

Sampling dates

Comments

Emissions (g)

			Emissions (g)	_
		Weekly(1)	Daily(2)	
Period #:	4	Sum of weekly results must be <3.5 gyear	Cannot Exceed 0.35 g/day	
03/29/2007 04/05/2007 04/12/2007	04/05/2007 04/12/2007 04/19/2007	< 1.21E-04 < 1.21E-04 < 1.21E-04	< 1.73E-05 < 1.74E-05	
04/19/2007 - Period #:	04/26/2007	1.21E-04Period 4 Sum: < 4.84E-04	< 1.73E-05 < 1.73E-05	
04/26/2007	05/03/2007 05/10/2007	< 1.21E-04	< 1.73E-05	
05/10/2007	05/17/2007	<pre></pre>	< 1.73E-05 < 1.72E-05	
05/24/2007	05/24/2007 05/31/2007	< 1.21E-04 < 1.21E-04	< 1.74E-05 < 1.73E-05	
Period #:	20	Period 5 Sum: < 6.05E-04		
05/31/2007	700/2/100	< 1.21E-04	< 1,73E-05	
06/14/2007	06/14/2007	< 1.21E-04	< 1.73E-05	
	06/28/2007	< 1.21E-04 < 1.21E-04	< 1.73E-05 < 1.73E-05	

1 745 05	CA-CI-142
٧	
HDER	
1.57E-03	
2nd Quarter Total: <	

4.84E-04

Period 6 Sum: <

TA-3-141 StackID: 3014101 Sampling dates

Sampling dates	dates	Em	Emissions (g)	Comments
		Weekly(1)	Daily(2)	
		Sum of weekly	L.	
Period #: 7		cours mast re <3.5 givear	t annot Exceed 0.35 g/day	
06/28/2007	07/05/2007	,		
07/05/2007	07/12/2007	40-312.1 \	< 1.70E-05	
07/12/2007	07/19/2007	+0-11710 / -0-1210 /	< 1.77E-05	
- 2007/19/2007	01/26/2007	1.21E-04 1.21E-04	< 1.74E-05	
	08/02/2007	1.21E-04	/ 1.75E-03 / 169E-05	
Period #:		Period 7 Sum: < 6.05E-04		
4 VI 10 U FF.				
- 08/02/2007	08/09/2007	< 1.21E-04	< 1.77E-05	
08/09/2007	08/16/2007	< 1.21E-04	< 1.74E-05	
08/16/2007	08/23/2007	1.89E-04	2.69E-05	
08/23/2007	08/30/2007	< 1.21E-04	< 1.74E-05	
		Period 8 Sum: < 5.52E-04		
Period #: 9				
08/30/2007	09/06/2007	< 1.21E-04	< 1.73E-05	
- 09/06/2007	09/13/2007	< 1.21E-04	< 1.71E-05	
09/13/2007	09/20/2007	< 1.21E-04	< 1.74E-05	
- 09/20/2007	09/27/2007	< 1.21E-04	< 1.76E-05	

^a HDER = Highest Daily Emission Rate

2.69E-05

HDER

1.64E-03

3rd Quarter Total: <

4.84E-04

Period 9 Sum: <

Beryllium 2007 Stack Emissions TA-03-0141

Comments													Run time due to Thanksgiving	holiday.				•			
Emissions (g)	Daily(2)	Cannot Exceed 0.35 g/day		< 1.73E-05	< 1.73E-05	< 1.73E-05	< 1.73E-05	< 1.69E-05		•	< I./8E-03	< 1.73E-05			< 1.52E-05		1 738.05	50-3671	< 1.73E-05	< 1.73E-05	
Emis	Weekly(1)	Sum of weekly results must be <3.5 g/year		< 1,21E-04	< 1,21E-04	< 1.21E-04	< 1.21E-04	< 1.21E-04	Period 10 Sum: < 6.05E-04		< 1.21E-04	< 1.21E-04		< 1.21E-04	< 1.21E-04	Period 11 Sum: < 4.84E-04		< 1.21E-04	< 1.21E-04	< 1.21E-04	Period 12 Sum: < 3.63E-04
TA-3-141 StackID: 3014101	Samping dates		Period #: 10	10/04/2007	ŧ	: 1	; 1	: 1		Period #: 11	11/01/2007	•		7000/10/11	11/13/2007	•	Period #: 12	12/06/2007	•	•	12/13/2007 - 12/20/2007

Sum of four quarters: < 6.31E-03

10 mg

2.01E-05

HDER

1.45E-03

4th Quarter Total: <

[&]quot;HDER = Highest Daily Emission Rate